

AMENDMENTS TO THE CLAIMS

The following listing of claims is provided in accordance with 37 C.F.R. § 1.121.

1. (Currently Amended) A method of casing a well bore comprising:
providing a casing comprising a sleeve and a stress-absorbing material that is coated on the sleeve to form a casing coating, wherein the casing coating surrounds at least a portion of the sleeve or that is embedded within the sleeve; and
placing the casing into the well bore.
- 2-4. (Canceled)
5. (Previously Presented) The method of claim 1 wherein the casing coating is coated on an interior surface of the sleeve.
6. (Previously Presented) The method of claim 1 wherein the casing coating is coated on an exterior surface of the sleeve.
7. (Previously Presented) The method of claim 1 wherein the casing coating has a thickness of less than about three inches.
8. (Previously Presented) The method of claim 1 wherein the casing coating is applied to the sleeve by extrusion, showering, dipping, brush coating, powder coating, or hot melting.
9. (Original) The method of claim 1 wherein the stress-absorbing material comprises a fiber, a resin, or an elastomer.
10. (Original) The method of claim 1 wherein a casing collar comprising a stress-absorbing material is connected to an end of the casing.
11. (Original) The method of claim 10 wherein the casing collar further comprises a hollow cylindrically shaped housing.

12. (Withdrawn) The method of claim 10 wherein the stress-absorbing material is embedded within the cylindrically shaped housing.

13. (Previously Presented) The method of claim 11 wherein the stress-absorbing material forms a collar coating coated on a surface of the hollow cylindrically shaped housing.

14. (Currently Amended) A method of casing a well bore comprising:
providing a casing comprising
a sleeve, and
a casing coating comprising a stress-absorbing material coated on the sleeve to surround at least a portion of the sleeve, wherein the stress-absorbing material comprises fibers; and
placing the casing into the well bore.

15. (Previously Presented) The method of claim 14 wherein the casing coating is coated on an exterior surface of the sleeve.

16. (Previously Presented) The method of claim 14 wherein the casing coating is coated on an interior surface of the sleeve.

17. (Original) The method of claim 14 wherein the casing coating has a thickness of less than about three inches.

18. (Original) The method of claim 14 wherein the casing coating is applied to the sleeve by extrusion, showering, dipping, brush coating, powder coating, or hot melting.

19. (Currently Amended) The method of claim 14 wherein the fibers comprise polypropylene fibers, nylon fibers, or carbon fibers ~~stress-absorbing material comprises a fiber, a resin, or an elastomer.~~

20. (Original) The method of claim 14 wherein a casing collar is connected to an end of the casing.

21. (Previously Presented) The method of claim 20 wherein the casing collar comprises a hollow cylindrically shaped housing, and a collar coating comprising a stress-absorbing material coated on the hollow cylindrically shaped housing.

22. (Currently Amended) A method of reducing the transmission of stress from a casing to a cement sheath comprising:

providing a casing that comprises a sleeve and a stress-absorbing material that is coated on the sleeve to form a casing coating, wherein the casing coating surrounds at least a portion of the sleeve ~~or that is embedded within the sleeve;~~

placing the casing into a well bore that penetrates a subterranean formation, thereby forming an annulus between the casing and the subterranean formation;

placing a cement composition into the annulus; and

allowing the cement composition to set within the annulus so as to bond the casing to a portion of the subterranean formation.

23-25. (Canceled)

26. (Previously Presented) The method of claim 22 wherein the casing coating is coated on an interior surface of the sleeve.

27. (Previously Presented) The method of claim 22 wherein the casing coating is coated on an exterior surface of the sleeve.

28. (Previously Presented) The method of claim 22 wherein the casing coating has a thickness of less than about three inches.

29. (Previously Presented) The method of claim 22 wherein the casing coating is applied to the sleeve by extrusion, showering, dipping, brush coating, powder coating, or hot melting.

30. (Original) The method of claim 22 wherein the stress-absorbing material comprises a fiber, a resin, or an elastomer.

31. (Original) The method of claim 22 wherein a casing collar is connected to an end of the casing.

32. (Original) The method of claim 31 wherein the casing collar further comprises a hollow cylindrically shaped housing.

33. (Withdrawn) The method of claim 32 wherein the stress-absorbing material is embedded within the cylindrically shaped housing.

34. (Previously Presented) The method of claim 32 wherein the stress-absorbing material forms a collar coating coated on a surface of the hollow cylindrically shaped housing.

35. (Currently Amended) A method of reducing the transmission of stress from a casing to a cement sheath comprising:

providing a casing that comprises

a sleeve, and

a casing coating comprising a stress-absorbing material coated on the sleeve to surround at least a portion of the sleeve, wherein the stress-absorbing material comprises fibers; and

placing the casing into a well bore that penetrates a subterranean formation, thereby forming an annulus between the casing and the subterranean formation;

placing a cement composition into the annulus; and

allowing the cement composition to set within the annulus so as to bond the casing to a portion of the subterranean formation.

36. (Previously Presented) The method of claim 35 wherein the casing coating is coated on an exterior surface of the sleeve.

37. (Previously Presented) The method of claim 35 wherein the casing coating is coated on an interior surface of the sleeve.

38. (Original) The method of claim 35 wherein the casing coating has a thickness of less than about three inches.

39. (Original) The method of claim 35 wherein the casing coating is applied to the casing by extrusion, showering, dipping, brush coating, powder coating, or hot melting.

40. (Currently Amended) The method of claim 35 wherein the fibers comprise polypropylene fibers, nylon fibers, or carbons fibers ~~stress-absorbing material comprises a fiber, a resin, or an elastomer.~~

41. (Original) The method of claim 35 wherein a casing collar is connected to an end of the casing.

42. (Original) The method of claim 41 wherein the casing collar comprises a hollow cylindrically shaped housing, and a collar coating comprising a stress-absorbing material disposed on the housing.

43. (Currently Amended) An improved casing comprising a sleeve and a stress-absorbing material that is coated on the sleeve, wherein the casing coating surrounds at least a portion of the sleeve ~~or that is embedded within the sleeve.~~

44-46. (Canceled)

47. (Currently Amended) The improved casing of claim 43 ~~claim 46~~ wherein the casing coating is coated on an interior surface of the sleeve.

48. (Currently Amended) The improved casing of claim 43 ~~claim 46~~ wherein the casing coating is coated on an exterior surface of the sleeve.

49. (Currently Amended) The improved casing of claim 43 ~~claim 46~~ wherein the casing coating has a thickness of less than about three inches.

50. (Currently Amended) The improved casing of claim 43 ~~claim 46~~ wherein the casing coating is applied to the sleeve by extrusion, showering, dipping, brush coating, powder coating, or hot melting.

51. (Original) The improved casing of claim 43 wherein the stress-absorbing material comprises a fiber, a resin, or an elastomer.

52. (Currently Amended) An improved casing comprising:

a sleeve; and

a casing coating comprising a stress-absorbing material coated on the sleeve to surround at least a portion of the sleeve, wherein the stress-absorbing material comprises fibers.

53. (Previously Presented) The improved casing of claim 52 wherein the casing coating is coated on an interior surface of the sleeve.

54. (Previously Presented) The improved casing of claim 52 wherein the casing coating is coated on an exterior surface of the sleeve.

55. (Original) The improved casing of claim 52 wherein the casing coating has a thickness of less than about three inches.

56. (Original) The improved casing of claim 52 wherein the casing coating is applied to the sleeve by extrusion, showering, dipping, brush coating, powder coating, or hot melting.

57. (Currently Amended) The improved casing of claim 52 wherein the fibers comprise polypropylene fibers, nylon fibers, or carbons fibers ~~stress-absorbing material comprises a fiber, a resin, or an elastomer.~~

58. (New) The method of claim 1 further comprising determining a high stress zone of a subterranean formation penetrated by the well bore, and wherein placing the casing into the well bore comprises placing the casing into the high stress zone.

59. (New) The method of claim 14 further comprising determining a high stress zone of a subterranean formation penetrated by the well bore, and wherein placing the casing into the well bore comprises placing the casing into the high stress zone.

60. (New) The method of claim 22 further comprising determining a high stress zone in the subterranean formation, and wherein placing the casing into the well bore comprises placing the casing into the high stress zone.

61. (New) The method of claim 35 further comprising determining a high stress zone in the subterranean formation, and wherein placing the casing into the well bore comprises placing the casing into the high stress zone.